

THE PATENT OFFICE OF THE PEOPLE'S REPUBLIC OF CHINA

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Applicant:	FUJITSU LIMITED	Date of Notification: Date: <u>19</u> Month: <u>03</u> Year: <u>2004</u>
Attorney:	FENG GENGXUAN	
Application No.:	01143306.X	
Title of the Invention:	IMAGE PROCESSING APPARATUS	

RECEIVED

JUN 02 2004

Notification of the First Office Action

Technology Center 2600

1. The applicant requested examination as to substance and examination has been carried out on the above-identified patent application for invention under Article 35(1) of the Patent Law of the People's Republic of China(hereinafter referred to as "the Patent Law").
 The Chinese Patent Office has decided to examine the application on its own initiative under Article 35(2) of the Patent Law.
2. The applicant claimed priority/priorities based on the application(s): filed in JP on Mar. 14, 2001, filed in _____ on _____, filed in _____ on _____,
- The applicant has provided the priority documents certified by the Patent Office where the priority application(s) was/were filed.
 The applicant has not provided the priority documents certified by the Patent Office where the priority application(s) was/were filed and therefore the priority claim(s) is/are deemed not to have been made under Article 30 of the Patent Law.
 The application is a PCT continuation.
3. The applicant submitted amendments to the application on _____ and on _____, wherein the amended _____ submitted on _____ and the amended _____ submitted on _____ are not acceptable, because said amendments do not comply with Article 33 of the Patent Law.
 Rule 51 of the Implementing Regulations of the Patent Law.
The specific reasons why the amendments are not allowable are set forth in the text portion of this Notification.
4. Examination as to substance was directed to the initial application documents as filed.
 Examination as to substance was directed to the documents as specified below:
pages _____ of the description, claims _____ and pages _____ of the drawings submitted on _____, pages _____ of the description, claims _____ and pages _____ of the drawings submitted on _____, pages _____ of the description, claims _____ and pages _____ of the drawings submitted on _____, the abstract submitted on _____, and the figure for the abstract submitted on _____.
5. This Notification is issued without search reports.
 This Notification is issued with consideration of the search results.
 Below is/are the reference document(s) cited in this Office Action(the reference number(s) will be used throughout the examination procedure):

No.	Number(s) or Title(s) of Reference(s)	Date of Publication (or the filing date of conflicting application)
1	CN144587A	Date: <u>5</u> Month: <u>3</u> Year: <u>1997</u>
2	WO0077718A1	Date: <u>21</u> Month: <u>12</u> Year: <u>2000</u>
3	US5889885A	Date: <u>30</u> Month: <u>3</u> Year: <u>1999</u>
4	US5054101A	Date: <u>1</u> Month: <u>10</u> Year: <u>1991</u>
5		Date: _____ Month: _____ Year: _____

6. Conclusions of the Action:

On the Specification:

- The subject matter contained in the application is not patentable under Article 5 of the Patent Law.
- The description does not comply with Article 26 paragraph 3 of the Patent Law.
- The draft of the description does not comply with Rule 18 of the Implementing Regulations.

On the Claims:

- Claim(s) 8 is/are not patentable under Article 25 of the Patent Law.
- Claim(s) _____ does/do not comply with the definition of inventions prescribed by Rule 2 paragraph 1 of the Implementing Regulations.
- Claim(s) 1,2,7-9 does/do not possess the novelty as required by Article 22 paragraph 2 of the Patent Law.
- Claim(s) _____ does/do not possess the inventiveness as required by Article 22 paragraph 3 of the Patent Law.
- Claim(s) _____ does/do not possess the practical applicability as required by Article 22 paragraph 4 of the Patent Law.
- Claim(s) 3 does/do not comply with Article 26 paragraph 4 of the Patent Law.
- Claim(s) _____ does/do not comply with Article 31 paragraph 1 of the Patent Law.
- Claim(s) 1,3,5-9 does/do not comply with the provisions of Rules 20-23 of the Implementing Regulations.
- Claim(s) _____ does/do not comply with Article 9 of the Patent Law.
- Claim(s) _____ does/do not comply with the provisions of Rule 12 paragraph 1 of the Implementing Regulations.

7. In view of the conclusions set forth above, the Examiner is of the opinion that:

- The applicant should make amendments as directed in the text portion of the Notification.
- The applicant should expound in the response reasons why the application is patentable and make amendments to the application where there are deficiencies as pointed out in the text portion of the Notification, otherwise, the application will not be allowed.
- The application contains no allowable invention, and therefore, if the applicant fails to submit sufficient reasons to prove that the application does have merits, it will be rejected.
-

8. The followings should be taken into consideration by the applicant in making the response:

- (1) Under Article 37 of the Patent Law, the applicant should respond to the office action within 4 months counting from the date of receipt of the Notification. If, without any justified reason, the time limit is not met, the application shall be deemed to have been withdrawn.
- (2) Any amendments to the application should be in conformity with the provisions of Article 33 of the Patent Law. Substitution pages should be in duplicate and the format of the substitution should be in conformity with the relevant provision contained in "The Examination Guidelines".
- (3) The response to the Notification and/or revision of the application should be mailed to or handed over to the "Reception Division" of the Patent Office, and documents not mailed or handed over to the Reception Divisions have no legal effect.
- (4) Without an appointment, the applicant and/or his agent shall not interview with the Examiner in the Patent Office.

9. This Notification contains a text portion of 3 pages and the following attachments:

- 4 cited reference(s), totaling 71 pages.

Examination Dept. _____ Examiner: _____

Seal of the Examination Department

Text of the Notification of the First Office Action

Through examination, the examiner's comments are as follows.

1. Claim 1 does not possess the novelty, which is not in conformity with the provisions of paragraph 2 of Article 22 of the Chinese Patent Law.

Claim 1 seeks to protect an image processing apparatus, while reference 1 (CN1144587A, WO95/27364) discloses a method for binarizing pixel data and its apparatus, and specifically discloses following features (refers to page 3, line 3 to page 4, line 9 and Fig. 1): image inputting means (3) inputs image into a binary data source (equivalent to a plurality of different image generating units) to generate a plurality of images, including the images whose characters are distinct but having noise (equivalent to the second images); these images are input to editing means 9 (equivalent to the image combining unit), and the editing means 9 generates a image that includes entire shape of the line pattern and does not includes the noise in the background.

By comparing the technical solution sought to be protected by claim 1 with that of reference 1, it can be found that all the features of claim 1 have been disclosed by reference 1. Claim 1 and reference 1 belong to the same technical field, solve the same technical problem, their technical solutions are substantially the same, and can produce the same effect. Thus, claim 1 does not possess the novelty, which is not in conformity with the provisions of paragraph 2 of Article 22 of the Chinese Patent Law.

2. The additional technical feature of claim 2 has been disclosed by reference 1. Reference 1 has disclosed that binary data source (1) generates binary images of different threshold; evaluation means (10) modifies the threshold based on the result of calculation, so as to eliminate the noise in the

background to obtain a sharp image. The functions of said binary data source (1) and evaluation means (10) are equivalent to the background noise eliminating unit. Thus, the additional technical feature of claim 2 has been disclosed by reference 1. When claim 1 that claim 2 refers to does not possess the novelty, claim 2 is not in conformity with the novelty of paragraph 2 of Article 22 of the Chinese Patent Law.

3. Claim 7 does not possess the novelty, which is not in conformity with the provisions of paragraph 2 of Article 22 of the Chinese Patent Law.

Claim 7 seeks to protect an image processing method, while reference 1 (CN1144587A, WO95/27364) discloses a method for binarizing pixel data and its apparatus, and specifically discloses following features (refers to page 3, line 3 to page 4, line 9 and Fig. 1): image inputting means (3) inputs image into a binary data source (equivalent to a plurality of different image generating units) to generate a plurality of images, including the images whose characters are distinct but having noise (equivalent to the second images); these images are input to editing means 9 (equivalent to the image combining unit), and the editing means 9 generates a image that includes entire shape of the line pattern and does not include the noise in the background.

By comparing the technical solution sought to be protected by claim 7 with that of reference 1, it can be found that all the features of claim 7 have been disclosed by reference 1. Claim 7 and reference 1 belong to the same technical field, solve the same technical problem, their technical solutions are substantially the same, and can produce the same effect. Thus, claim 7 does not possess the novelty, which is not in conformity with the provisions of paragraph 2 of Article 22 of the Chinese Patent Law.

4. The words "almost" and "satisfactory" in claims 1, 7, 8, 9 are

indefinite expressions, which causes the protection scope of the claims unclear, and this is not in conformity with the provisions of paragraph 1 of Rule 20 of the Implementing Regulations of the Chinese Patent Law.

5. “8-concatenated components of black pixels” in claim 3 is not described in the embodiments of the specification, which is not supported by the specification, and this is not in conformity with the provisions of paragraph 4 of Article 26 of the Chinese Patent Law. The applicant should delete it.

6. The meaning of “4-or-8-concatenated components of black pixels” in claim 3 is not clear, which causes the protection scope of claim 3 unclear, and this is not in conformity with the provisions of paragraph 1 of Rule 20 of the Implementing Regulations of the Chinese Patent Law.

7. “Nibalck” method, “Yanowitz” method and “Bruckstein” method are mentioned in claims 5 and 6. However, how to achieve said method are not clear. They are not common terms in the art, and they are not specifically described in the specification. Thus, such unclear expressions cause the protection scope of claims 5-6 unclear, and this is not in conformity with the provisions of paragraph 1 of Rule 20 of the Implementing Regulations of the Chinese Patent Law. The applicant should delete claims 5-6.

8. Claim 8 seeks to protect a program, whose contents area man-made rules rather than a technical solution. In accordance with the provisions of paragraph 1 (2) of Article 25 of the Chinese Patent Law, the technical solution that claim 8 seeks to protect falls into the category of rules and methods for mental activities, and are not patentable. Even if claim 8 is amended to a method claim, the amended claim will be identical with claim 7,

and it does not possess novelty.

9. Claim 9 seeks to protect a storage medium, which is an apparatus claim. As an apparatus claims, it should be defined by structural features. However, claim 9 is defined by stored contents (such as programs stored thereon), which causes the protection scope of the claims unclear, and this is not in conformity with the provisions of paragraph 1 of Rule 20 of the Implementing Regulations of the Chinese Patent Law. Even if claim 9 is amended to a method claim or an apparatus claim, the amended claim will be identical with claim 7, and it does not possess novelty.

10. Besides, reference 2 –4 also destroy the novelty of claims 1, 2, 7.

If the applicant change a depend claim to independent claim, it should be noted that the new claim is demarcated into preamble portion and characterizing portion based on reference 1.

11. “4-concatenated components” mentioned on page 27, line 7 (English text) is not clear. It is not clear which part it is. Is it 4 connected pixel or 4 connected binary images? The applicant should make amendment on it.

12. The refernce number “S6” and “S7” are not mentioned in the specification, which is not in conformity with the provisions of paragraph 1 of Rule 19 of the Implementing Regulations of the Chinese Patent Law. The applicant should make amendment on it.

Based on the above reasons, the application cannot be patented in accordance with the present text. The applicant should make amendments as directed in the Notification within the specified time limit, and overcome the existing deficiencies, otherwise, the application will be rejected. The

applicant should note that the amendments to the application documents cannot go beyond the disclosure contained in the initial specification and claims as required by Article 33 of the Chinese Patent Law.

12 中华人民共和国国家知识产权局

邮政编码：100031

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中国国际贸易促进委员会专利商标事务所

11E012669. 冯 廉 宣



申请号：01143306.X 部门及通知书类型：9-C

发文日期：

申请人：富士通株式会社

发明名称：图像处理设备

第一次审查意见通知书

- 依申请人提出的实审请求，根据专利法第 35 条第 1 款的规定，审查员对上述发明专利申请进行实质审查。
- 根据专利法第 35 条第 2 款的规定，国家知识产权局决定自行对上述发明专利申请进行审查。

- 申请人要求以其在：

JP 专利局的申请日 2001 年 3 月 14 日 为优先权日，
专利局的申请日 _____ 为优先权日；
专利局的申请日 _____ 为优先权日；
专利局的申请日 _____ 为优先权日；
专利局的申请日 _____ 为优先权日。

- 申请人已经提交了经原申请国受理机关证明的第一次提出的在先申请文件的副本。
- 申请人尚未提交经原申请国受理机关证明的第一次提出的在先申请文件的副本，根据专利法第 30 条的规定视为未提出优先权要求。
- 申请人于 ____ 年 ____ 月 ____ 日和 ____ 年 ____ 月 ____ 日提交了修改文件。
 经审查，其中： ____ 年 ____ 月 ____ 日提交的 ____ 不能被接受； ____ 年 ____ 月 ____ 日提交的 ____ 不能被接受；
因为上述修改： 不符合专利法第 33 条的规定。 不符合实施细则第 51 条的规定。
修改不能被接受的具体理由见通知书正文部分。

- 审查是针对原始申请文件进行的。
- 审查是针对下述申请文件进行的：

说明书 申请日提交的原始申请文件的第 ____ 页；
____ 年 ____ 月 ____ 日提交的第 ____ 页； ____ 年 ____ 月 ____ 日提交的第 ____ 页；
____ 年 ____ 月 ____ 日提交的第 ____ 页； ____ 年 ____ 月 ____ 日提交的第 ____ 页；

权利要求 申请日提交的原始申请文件的第 ____ 项；
____ 年 ____ 月 ____ 日提交的第 ____ 项； ____ 年 ____ 月 ____ 日提交的第 ____ 项；
____ 年 ____ 月 ____ 日提交的第 ____ 项； ____ 年 ____ 月 ____ 日提交的第 ____ 项；

附图 申请日提交的原始申请文件的第 ____ 页；
____ 年 ____ 月 ____ 日提交的第 ____ 页； ____ 年 ____ 月 ____ 日提交的第 ____ 页；
____ 年 ____ 月 ____ 日提交的第 ____ 页； ____ 年 ____ 月 ____ 日提交的第 ____ 页；

说明书摘要 申请日提交的； ____ 年 ____ 月 ____ 日提交的；

摘要附图 申请日提交的； ____ 年 ____ 月 ____ 日提交的。

- 本通知书是在未进行检索的情况下作出的。



中华人民共和国国家知识产权局

- 本通知书是在进行了检索的情况下作出的。
 本通知书引用下述对比文献(其编号在今后的审查过程中继续沿用):

编 号	文 件 号 或 名 称	公 开 日 期 (或抵触申请的申请日)
1	CN1144587A	1997 年 3 月 5 日
2	WO0077718A1	2000 年 12 月 21 日
3	US5889885A	1999 年 3 月 30 日
4	US5054101A	1991 年 10 月 1 日

6. 审查的结论性意见:

- 关于说明书:
 申请的内容属于专利法第 5 条规定的不授予专利权的范围。
 说明书不符合专利法第 26 条第 3 款的规定。
 说明书的撰写不符合实施细则第 18 条的规定。
- 关于权利要求书:
 权利要求 1, 2, 7-9 不具备专利法第 22 条第 2 款规定的新颖性。
 权利要求 ____ 不具备专利法第 22 条第 3 款规定的创造性。
 权利要求 ____ 不具备专利法第 22 条第 4 款规定的实用性。
 权利要求 8 属于专利法第 25 条规定的不授予专利权的范围。
 权利要求 3 不符合专利法第 26 条第 4 款的规定。
 权利要求 ____ 不符合专利法第 31 条第 1 款的规定。
 权利要求 ____ 不符合实施细则第 2 条第 1 款关于发明的定义。
 权利要求 ____ 不符合实施细则第 13 条第 1 款的规定。
 权利要求 1, 3, 5-9 不符合实施细则第 20 条至第 23 条的规定。

上述结论性意见的具体分析见本通知书的正文部分。

7. 基于上述结论性意见, 审查员认为:

- 申请人应按照通知书正文部分提出的要求, 对申请文件进行修改。
 申请人应在意见陈述书中论述其专利申请可以被授予专利权的理由, 并对通知书正文部分中指出的不符合规定之处进行修改, 否则将不能授予专利权。
 专利申请中没有可以被授予专利权的实质性内容, 如果申请人没有陈述理由或者陈述理由不充分, 其申请将被驳回。

8. 申请人应注意下述事项:

- (1) 根据专利法第 37 条的规定, 申请人应在收到本通知书之日起的 肆 个月内陈述意见, 如果申请人无正当理由逾期不答复, 其申请将被视为撤回。
- (2) 申请人对其申请的修改应符合专利法第 33 条的规定, 修改文本应一式两份, 其格式应符合审查指南的有关规定。
- (3) 申请人的意见陈述书和/或修改文本应邮寄或递交给国家知识产权局专利局受理处, 凡未邮寄或递交给受理处的文件不具备法律效力。
- (4) 未经预约, 申请人和/或代理人不得前来国家知识产权局专利局与审查员举行会晤。

9. 本通知书正文部分共有 3 页, 并附有下述附件:

- 引用的对比文件的复印件共 4 份 71 页。



第一次审查意见通知书正文

本发明专利申请涉及一种图像处理设备。

权利要求 1 要求保护一种图像处理设备，对比文件 1 (CN1144587A) 披露了一种对像素数据进行二进制化的方法和装置，并具体披露了以下内容：图像输入装置 (3) 将摄制的图像输入二进制数据源（相当于多个不同的图像生成单元）产生多个图像其中包括字符清楚但包含干扰图案的图像（相当于第二图像），和抑制了背景噪声和干扰信息，但是只有对比度高的字符才能很好的辨认的的图像（相当于第一图像），这些图像被输入剪辑装置 (9, 相当于图像组合单元) 该图像剪辑装置 (9) 产生一个图形的线形完整而不包括背景干扰的图像（见对比文件 1 说明书第 3 页第 3 行到第 4 页第 9 行和附图 1）。权利要求 1 的全部技术特征已被对比文件 1 公开，权利要求 1 与对比文件 1 属于相同技术领域，所解决的技术问题和采用的技术方案相同，达到相同的技术效果，因此权利要求 1 不具备专利法第 22 条第 2 款所规定的新颖性。

权利要求 2 的附加技术特征是：包括一个背景干扰消除单元，用于从第一和第二图像中消除背景区中的干扰。对比文件 1 中已经披露了二进制数据源 (1) 采用不同的阈值产生二进制图像，评估装置 (10) 根据计算的结果修正判决阈值，以背景区中的干扰获得一个清晰的没有噪声的图像。上述二进制数据源 (1) 评估装置 (10) 的功能相当于背景干扰消除单元。权利要求 2 的附加技术特征已被对比文件 1 所公开，由于权利要求 1 不具备新颖性，因此权利要求 2 也不具备专利法第 22 条第 2 款所规定的新颖性。

权利要求 7 要求保护一种图像处理方法，对比文件 1 (CN1144587A) 披露了一种对像素数据进行二进制化的方法和装置，并具体披露了以下内容：图像输入装置 (3) 将摄制的图像输入二进制数据源（相当于多个不同的图像生成单元）产生多个图像其中包括字符清楚但包含干扰图案的图像（相当于第二图像），和抑制了背景噪声和干扰信息，但是只有对比度高的字符才能很好的辨认的的图像（相当于第一图像），这些图像被输入剪辑装置 (9, 相当于图像组合单元) 该图像剪辑装置 (9) 产生一个图形的线形完整而不包括背景干扰的图像（见对比文件 1 说明书第 3 页第 3 行到第 4 页第 9 行和附图 1）。权利要求 7 要求保护的图像处理方法的全部技术特征已被对比文件 1 公开，权利要求 7 与对比文件

1 属于相同技术领域，所解决的技术问题和采用的技术方案相同，达到相同的技术效果，因此权利要求 7 不具备专利法第 22 条第 2 款所规定的新颖性。

本申请的权利要求书中存在下列问题：

权利要求 1 和权利要求 7 中多出提到“几乎包括”某个图像，和“令人满意”的图像的描述，这种描述方式是一种含义不确定的表述，这类含义不确定的描述导致权利要求 1 和权利要求 7 要求的保护范围不确定，不符合专利法实施细则第 20 条第 1 款的规定。类似的，权利要求 8 和权利要求 9 的相应内容也不符合专利法实施细则第 20 条第 1 款的规定。

权利要求 3 中提到“黑色像素的 4 连或 8 连部分”，其中“8 连部分”在说明书的具体实施方式部分没有相应的描述内容中，上述内容没有以说明书为依据，不符合专利法第 26 条第 4 款的规定。申请人应该将上述不能得到说明书支持内容删除。

权利要求 3 中提到“黑色像素的 4 连或 8 连部分”，其中“4 连或 8 连部分”要表述的具体含义不清楚，导致权利要求 3 要求的保护范围不确定，不符合专利法实施细则第 20 条第 1 款的规定。

权利要求 5 和权利要求 6 中提到“Niblack”方法，“Yanowitz”方法，“Bruckstein”方法，上述各种二值化方法的具体实现方式不清楚，也不是本领域的通用技术术语，在说明书中也没有对上述方法做出具体描述。这类含义不清楚的描述导致权利要求 5 和权利要求 6 要求的保护范围不确定，不符合专利法实施细则第 20 条第 1 款的规定。申请人应该将权利要求 5 和权利要求 6 删除。

权利要求 8 要求保护一种程序其内容是一种人为规定的规则，而不是一种技术方案，属于专利法第 25 条第 1 款第（二）项所述的智力活动的规则和方法，因此不能被授予专利权。即使申请人对权利要求 8 作出修改，将其改为方法权利要求，权利要求 8 要求保护的内容将与权利要求 7 重复，不符合专利法实施细则第 20 条第 1 款有关权利要求应该清楚、简洁的规定。而且如对权利要求 7 的评述，修改后的权利要求 8 也不具备专利法第 22 条第 2 款所规定的新颖性。

权利要求 9 要求保护一种存储介质，属于一种产品权利要求。对于产品权利要求应当用产品的结构特征来限定，但是，权利要求 9 却使用其存储媒体的内容（例如存储在其上的程序）来限定，导致权利要求 9 要求的保护范围不清

楚，不符合专利法实施细则第 20 条第 1 款的规定。即使申请人对权利要求 8 作出修改，将其改为方法权利要求或产品权利要求，权利要求 9 要求保护的内容将与权利要求 1 或权利要求 7 重复，不符合专利法实施细则第 20 条第 1 款有关权利要求应该清楚、简洁的规定。而且如对权利要求 1 和权利要求 7 的评述，修改后的权利要求 9 也不具备专利法第 22 条第 2 款所规定的新颖性。

另外对比文件 2 (W00077718A1)、对比文件 3 (US5889885A) 和对比文件 4 (US5054101A) 也影响权利要求 1、权利要求 2 和权利要求 7 的新颖性。

如果申请人将从属权利要求上升为独立权利要求，应该以对比文件 1 为基础划分权利要求的前序部分和特征部分，以符合专利法实施细则第 22 条第 1 款的规定。

本申请的说明书中存在下列问题：

多处提到“Sobel 边缘过滤器”，这种称呼不是本领域通用科技术语，其具体含义不清楚，请修改为本领域常用科技术语的描述。说明书第 13 页第 24 行“二值图像的 4 连部分”的描述不清楚，“4 连部分”所致的是哪一个部分，相连的 4 个像素？还是相连的 4 个二值图像？上述内容不符合专利法实施细则第 18 条第 1 款的规定，申请人应该对其加以修改。

说明书附图 8 中附图标记“S6, S7”在说明书的相应描述中没有提到，不符合专利法实施细则第 19 条第 1 款的规定，申请人应该对其加以修改。

综合上述各点，申请人应在意见陈述书中论述其专利申请可以被授予专利权的理由，并对通知书正文部分中指出的不符合规定之处进行修改，否则将不能授予专利权。请申请人注意，对申请文件的修改应该符合专利法第 33 条的规定，不得超出原说明书和权利要求书的记载范围，否则，本申请将被驳回。